IN THE CLAIMS:

1. (Currently Amended) A system for recognizing zero-amplitude symbols in a quadrature amplitude modulated (QAM) signal, comprising:

a zero-amplitude symbol interpreter that recognizes a candidate symbol extracted from said signal as being a zero-amplitude symbol based on when said candidate symbol is within a zone having a boundary formed by a set of points that are equidistant between an origin of a constellation of symbols and a nearest one of four proximate symbols, said zero-amplitude symbol interrupting a regular rectangular array of said constellation of symbols, wherein ideal symbols of said regular rectangular array are substantially equidistant to each other.

2. (Previously Presented) The system as recited in Claim 1 wherein said zero-amplitude symbol interpreter determines said candidate symbol is within said zone when a sum of an absolute value of A and B coordinates of said candidate symbol is less than one.

3. (Previously Presented) The system as recited in Claim 1 wherein said zero-amplitude symbol separates subframes or constitutes an end-of-file symbol according to a Home Phoneline Networking Alliance standard.

4. (Previously Presented) The system as recited in Claim 1 wherein said zero-amplitude symbol interpreter employs a linear algorithm to determine said candidate symbol is within said zone.

5. (Original) The system as recited in Claim 1 wherein said symbols proximate said origin are located at relative amplitudes of:

1,1,

1,-1,

-1,1, and

-1,-1.

6. (Original) The system as recited in Claim 1 wherein said constellation is arranged on a Cartesian plane.

7. (Previously Presented) The system as recited in Claim 1 wherein said zero-amplitude symbol interpreter determines if said candidate symbol is within said zone without employing a slicer table.

8. (Currently Amended) A method of recognizing zero-amplitude symbols in a quadrature amplitude modulated (QAM) signal, comprising:

extracting a candidate symbol from said signal;

locating said candidate symbol relative to a constellation of symbols;

determining if said candidate symbol is within a zone having a boundary formed by a set of points that are equidistant between an origin of said constellation and a nearest one of four symbols proximate thereto; and

recognizing said candidate symbol as being a zero-amplitude symbol when said candidate symbol is within said zone, said zero-amplitude symbol interrupting a regular rectangular array of said constellation of symbols

9. (Previously Presented) The method as recited in Claim 8 wherein said candidate symbol is within said zone when a sum of an absolute value of A and B coordinates of said candidate symbol is less than one.

10. (Original) The method as recited in Claim 8 wherein a plurality of said zero-amplitude symbols separate subframes according to a Home Phoneline Networking Alliance standard.

11. (Original) The method as recited in Claim 8 wherein said symbols proximate said origin number four in quantity.

12. (Original) The method as recited in Claim 8 wherein said symbols proximate said origin are located at relative amplitudes of:

1,1,

1,-1,

-1,1, and

-1,-1.

13. (Original) The method as recited in Claim 8 wherein said constellation is arranged on a Cartesian plane.

14. (Previously Presented) The method as recited in Claim 8 wherein if said candidate symbol is not within said zone, employing a slicer table to recognize said candidate symbol.

15. (Currently Amended) A digital receiver, comprising:

a digital-to-analog (D/A) converter that converts a received quadrature amplitude modulated (QAM) signal in digital form to analog form;

a demodulator, coupled to said D/A converter, that demodulates said QAM signal;

an equalizer, coupled to said demodulator, that equalizes said QAM signal;

a slicer, coupled to said equalizer, that recognizes nonzero- and zero-amplitude symbols in said QAM signal, said slicer having a system for recognizing said zero-amplitude symbols, including:

an amplitude detector that extracts a candidate symbol from said signal and locates said candidate symbol relative to a constellation of symbols, and

a zero-amplitude symbol interpreter, associated with said amplitude detector, that recognizes said candidate symbol as being a zero-amplitude symbol based on when said candidate symbol is within a zone having a boundary formed by a set of points that are equidistant between an origin of said constellation and a nearest one of four symbols proximate thereto, said zero-amplitude symbol interrupting a regular rectangular array of said constellation of symbols, wherein ideal symbols of said regular rectangular array are substantially equidistant to each other; and

a decoder, coupled to said slicer, that decodes said nonzero- and zero-amplitude symbols to yield data.

16. (Previously Presented) The receiver as recited in Claim 15 wherein said zero-amplitude symbol interpreter determines said candidate symbol is within said zone when a sum of an absolute value of A and B coordinates of said candidate symbol is less than one.

17. (Previously Presented) The receiver as recited in Claim 15 wherein a plurality of said zero-amplitude symbols separate subframes or constitute an end-of-file symbol according to a Home Phoneline Networking Alliance standard.

18. (Original) The receiver as recited in Claim 15 wherein said symbols proximate said origin number four in quantity.

19. (Original) The receiver as recited in Claim 15 wherein said symbols proximate said origin are located at relative amplitudes of:

1,1,

1,-1,

-1,1, and

-1,-1.

20. (Original) The receiver as recited in Claim 15 wherein said constellation is arranged on a Cartesian plane.

21. (Previously Presented) The receiver as recited in Claim 15 wherein said slicer employs a slicer table to interpret said nonzero symbols and said zero-amplitude symbol interpreter employs a linear algorithm, free of said slicer table, to determine if said candidate symbol is within said zone.